DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014177 Address: 333 Burma Road **Date Inspected:** 18-May-2010

City: Oakland, CA 94607

OSM Arrival Time: 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1500 Prime Contractor: American Bridge/Fluor Enterprises, a JV Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

CWI Name: See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes **Delayed / Cancelled:** No N/A

34-0006 **Bridge No: Component:** Orthotropic Box Girders (OBG)

Summary of Items Observed:

Quality Assurance inspector (QA) Michael Foerder was at the American Bridge/Flour (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

- 1. OBG Field Splice 3E/4E Face C (Inside) Repairs
- 2. OBG Field Splice 4E/5E Face A (Outside) UT Review
- 3. OBG Field Splice 5E/6E Face A (Outside)
- 4. Project Files

Field Splice 3E/4E Face C (Inside) Repairs

The QA inspector periodically observed ABF welding personnel Mitch Sittinger performing shielded metal arc welding (SMAW) in order to excavate and remove rejectable indications previously identified by QC utilizing Ultrasonic Testing (UT). QC inspector Tony Sherwood was noted to be present in order to monitor the progress and adherence to the welding procedure specification designated as ABF-WPS-D1.5-1001 Repair. Mr. Sittinger was noted to be performing the excavations at approximate Y locations designated 2400mm and 2800mm. After the completion of the cleaning and shaping of the excavations the welder proceeded to perform the shielded metal arc welding (SMAW) and the welding parameters were verified to be 135 with the pre heat and interpass temperature noted to be within the established WPS. These locations were completed later in the shift and appeared to be in general conformance with the contract documents.

Field Splice 4E/5E Face A (Outside)



WELDING INSPECTION REPORT

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The QA inspector periodically observed QC inspector Tom Pascaulone performing ultrasonic testing (UT) on this date for the deck plate. The QC inspector began the examination with a zero degree transducer in order to perform the lamination scan and to locate the internal U-rib stiffeners for assisting in the interpretation during the shear wave scan. The QC inspector completed the lamination scan for welds designated A5, A4, and A3 and began performing the shear wave examination utilizing a 70 degree transducer and wedge combination. Several areas were marked for further evaluation by the end of the QA inspector's shift and the item appeared to be progressing in general conformance with the contract documents.

Field Splice 5E/6E Face A (Outside)

The QA inspector reviewed the status of OBG field splice 5E/6E Face A and noted the contractor was not performing any welding at this location at the beginning of the shift but several ABF personnel were present along with QC inspectors Jessie Cayabyab and Bonafacio Daquinag. QC inspector Jessie Cayabyab was observed performing UT utilizing a zero degree transducer in order to locate the internal U-rib stiffeners and Mr. Bonafacio was assisting in the lay-out. ABF Field Engineering Superintendent John Callaghan relayed to the QA inspector the contractor would be placing temporary attachments by welding them to the top deck plate in the areas which exhibited planar misalignment in excess of the contract requirements by utilizing portable hydraulic jacks attempting to bring the areas in question into conformance. The QC inspectors' work progressed for a portion of the shift and was completed and the contractor began laying out the attachments. The QA inspector was requested to attend structure construction's internal staff meeting by Assistant Structure Representative Jason Wilcox and this information was relayed to lead QA inspector Bill Levell and the QA inspector went to the office located at Burma Road for attendance. See QA inspector Rick Bettencourt's TL-6031 for further information regarding the progression of work and the pressures utilized.

Project Files

The QA inspector spent a portion of the shift updating the contract files and tracking logs for QA reports, welder qualification records, welding procedure specifications, procedure qualification records and submittals on this date.

Summary of Conversations:

As noted above in items observed.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916)813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Foerder, Mike	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer